L. TYPHOON AMY (3-7 OCTOBER 1959)

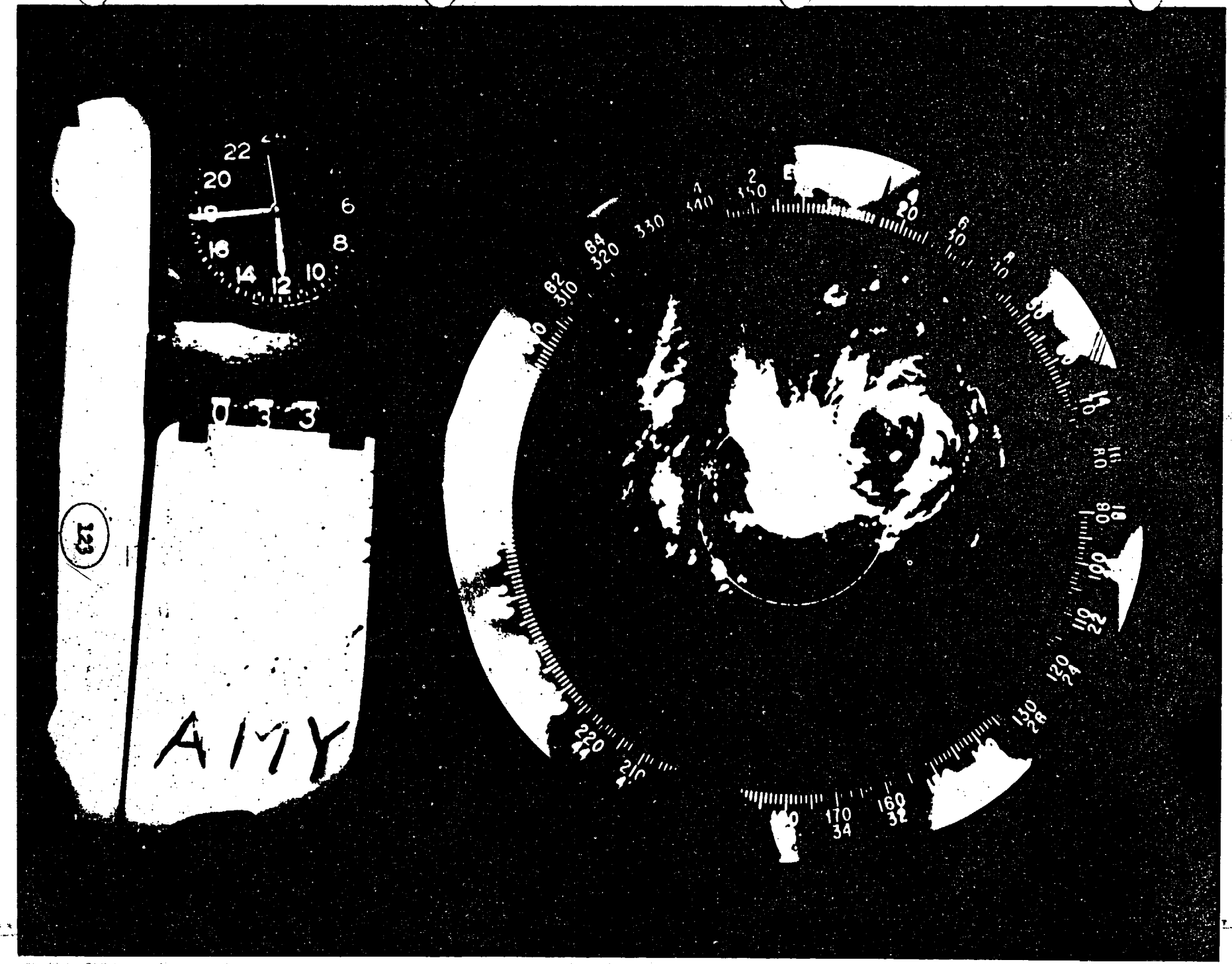
On 1 October, a weak cyclonic circulation on the Intertropical Convergence Zone was observed to the east of the Philippines. Subsequent analyses indicated that this circulation was almost stationary and that pressures in the area were gradually decreasing. Reconnaissance was therefore requested and at 030900Z a weak diffuse center, with maximum surface winds of 30 knots, was located in the vicinity of 17.5N - 125.0E. Based on this information JTWC issued warning number one on Tropical Depression AMY.

For the first 30 hours AMY moved to the north-northeast at an average speed of 6 knots. Thereafter, AMY accelerated quite rapidly, and when she passed slightly east of Kadena Air Force Base, Okinawa early on the 6th, her speed was 28 knots. During this period AMY had been upgraded to a tropical storm at 031800Z, had reached typhoon intensity at 050000Z, and had then weakened and again becoming a tropical storm at 060000Z. By 070000Z, over central Honshu, AMY had weakened further and was rapidly becoming extra-tropical. A final warning was issued at 070600Z.

AMY was somewhat unusual in that, throughout the life of the storm, the strongest surface and 700 millibar winds appeared to be confined to the eastern semicircle. As an example, when AMY passed approximately 35 miles to the east, Kadena Air Force Base reported maximum sustained winds of only 25 knots with gusts to 45 knots. However, approximately one hour later, a reconnaissance aircraft reported the surface wind to be 70 knots in AMY's southeast quadrant. A radar photograph of AMY, taken by the Kadena Weather Detachment as

AMY passed abeam of Okinawa, is included as page 123. The photograph, taken at 060245Z, clearly shows well developed wall clouds in all quadrants. The photograph therefore sheds no light as to why the winds in the east semicircle were invariably reported by reconnaissance as being 20 to 30 knots higher than those in the west semicircle. AMY also had an unusual track and did not conform to October Climatology. However, Typhoon OPAL of 1955 showed a similar path and had similar characteristics. Seventeen warnings were issued covering a period of 5 days.

Though menacing Okinawa and Southern Japan, no damage due to Typhoon AMY was reported.


22
20
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0 3 3
123
AMY

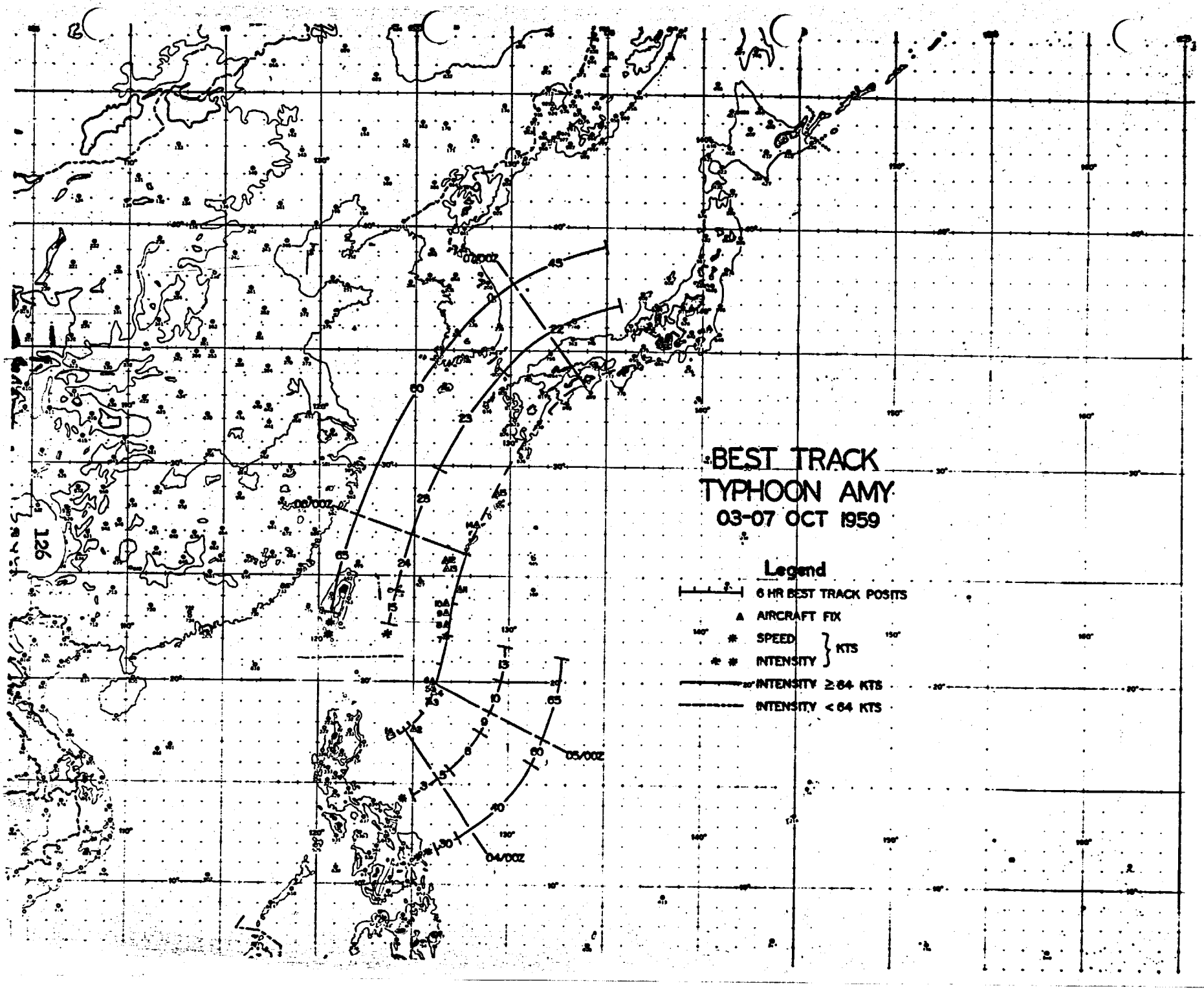
RECONNAISSANCE AIRCRAFT FIXES - TYPHOON AMY

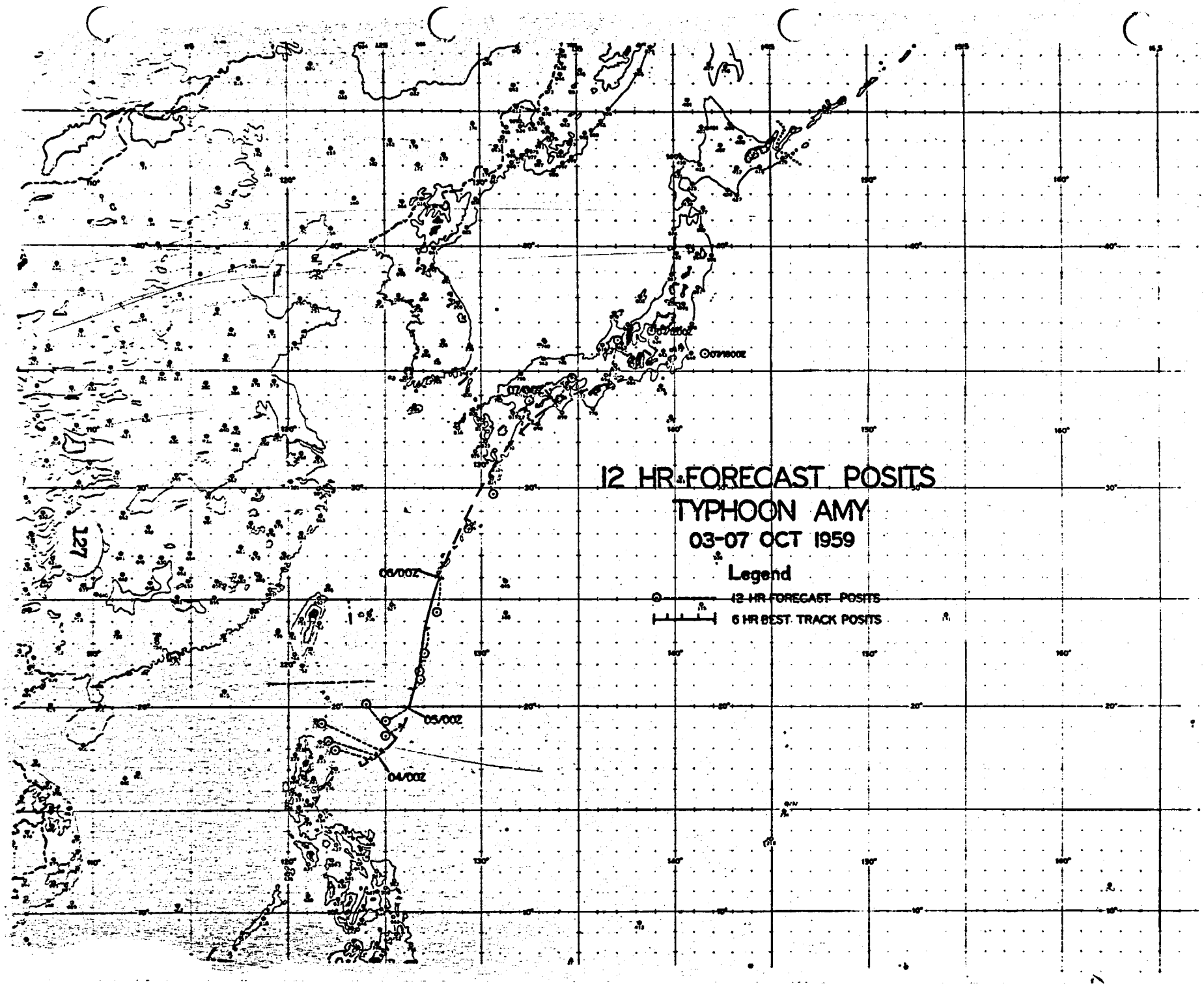
FIX NO.	TIME	LAT.	LONG.	*UNIT METHOD & ACCY	MIN SLP MBS	MAX SFC WND	MIN 700MB HGT	MAX FLT LVL WND	700MB TEMP (°C)	700MB DEWPT (°C)	EYE CHARACTERISTICS
1	030900Z	17.5N	123.9E	54-P-10	1000	40	10000	30	11	08	CIRC ILL DEFINED
2	040600Z	17.7N	125.0E	54-P-10	993	- -	9980	25	10	10	NOT DEFINED
3	041744Z	19.0N	125.7E	54-P-5	- -	- -	10020	50	13	05	----------
4	042000Z	19.5N	126.0E	54-T-10	- -	- -	- -	- -	- -	- -	----------
5	042130Z	19.7N	126.0E	54-P-5	987	70	9910	50	17	04	ELLIP ILL DEFINED
6	050020Z	20.0N	126.0E	54-P-5	987	75	9870	50	15	06	ILL DEFINED
7	051145Z	22.1N	126.8E	54-R-5	- -	- -	- -	65	- -	- -	CIRC DIA 20 MI
8	051400Z	22.7N	126.8E	54-R-10	- -	- -	- -	70	- -	- -	CIRC DIA 20 MI
9	051530Z	23.2N	126.7E	54-R-10	- -	- -	9960	70	16	16	CIRC DIA 25 MI
10	051800Z	23.7N	126.8E	54-R-10	- -	- -	- -	- -	- -	- -	CIRC DIA 25 MI
11	052000Z	24.3N	127.4E	54-R—	- -	- -	- -	- -	- -	- -	----------
12	052130Z	25.8N	126.8E	54-P-10	1000	45	10020	60	08	07	EYE DIFFUSE
13	052237Z	25.3N	127.8E	12-R-5	- -	- -	- -	- -	- -	- -	CIRC DIA 20 MI
14	060345Z	27.2N	128.3E	54-P-1	990	70	9760	65	18	15	----------
15	060745Z	28.8N	129.2E	54-P-1	977	95	9670	85	17	13	CIRC DIA 40 MI

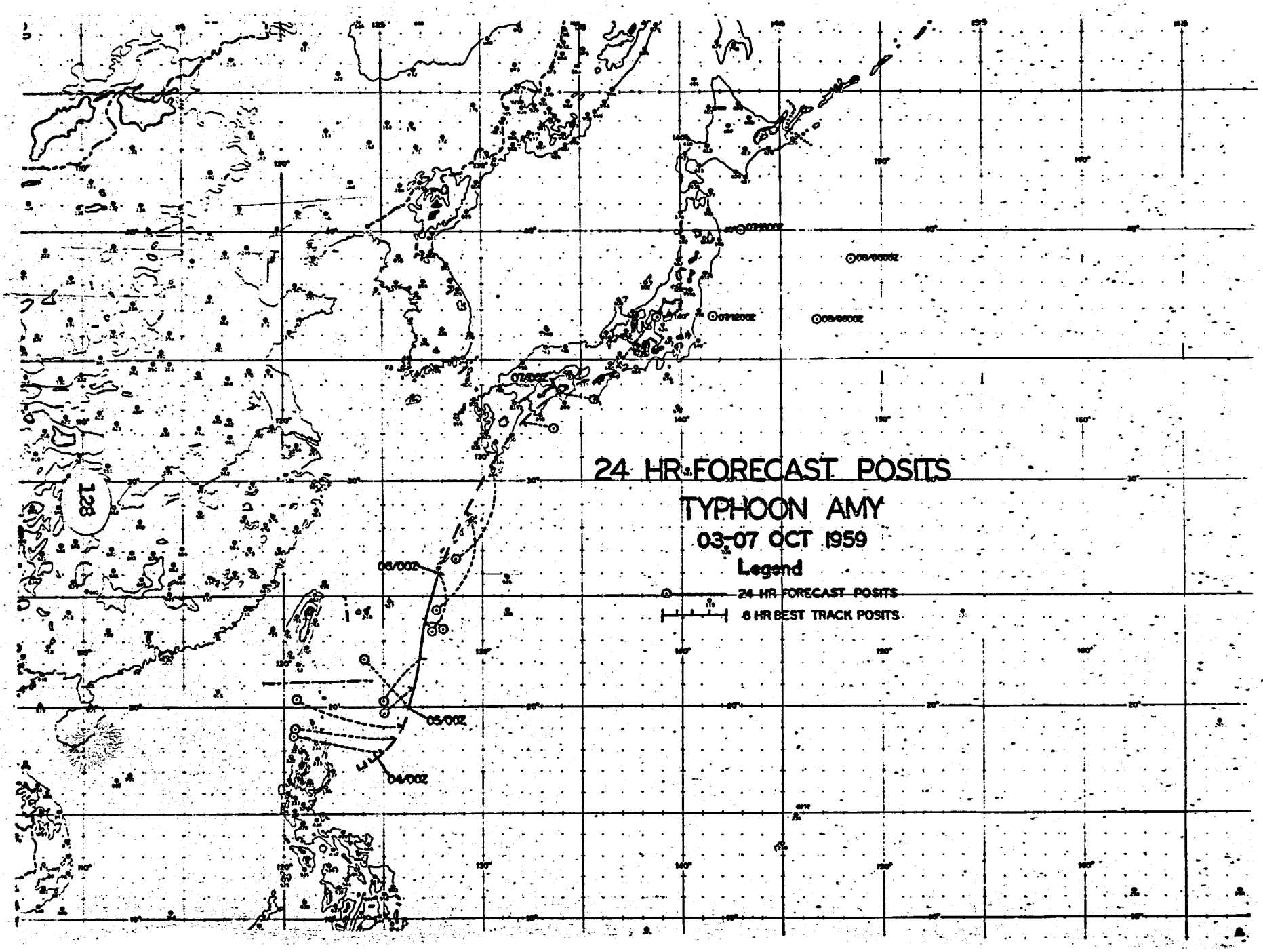
TYPHOON AMY 03 - 07 OCT 1959
POSITION AND FORECAST VERIFICATION DATA

DTG	STORM POSITION LAT.	LONG.	12 HR ERROR DEG.	DISTANCE	24 HR ERROR DEG.	DISTANCE
030600Z	17.2N	123.8E	- - - -		- - - -	
031200Z	17.3N	124.1E	- - - -		- - - -	
031800Z	17.4N	124.3E	- - - -		- - - -	
040000Z	17.6N	124.6E	- - - -		- - - -	
040600Z	17.8N	124.9E	296	193	- - - -	
041200Z	18.4N	125.4E	322	130	- - - -	
041800Z	19.1N	125.8E	247	50	284	302
050000Z	19.9N	126.2E	238	78	318	178
050600Z	20.9N	126.5E	038	35	231	106
051200Z	22.2N	126.8E	185	26	220	156
051800Z	23.8N	127.0E	180	70	100	57
060000Z	26.0N	127.9E	184	86	184	157
060600Z	28.6N	129.1E	166	30	195	278
061200Z	30.7N	130.4E	158	53	201	248
061800Z	32.4N	132.0E	197	84	273	196
070000Z	33.8N	133.9E	210	75	106	87
070600Z	34.4N	136.4E	198	105	223	180

AVERAGE 12 HOUR ERROR 78.1 NM
AVERAGE 24 HOUR ERROR 176.8 NM


BEST TRACK
TYPHOON AMY
03-07 OCT 1959
Legend
6 HR BEST TRACK POSITS
AIRCRAFT FIX
SPEED
INTENSITY
KTS
INTENSITY ≥ 64 KTS
INTENSITY < 64 KTS
02/00Z
03/00Z
04/00Z
05/00Z
126


12 HR FORECAST POSITS
TYPHOON AMY
03-07 OCT 1959
Legend
12 HR FORECAST POSITS
6 HR BEST TRACK POSITS
03/00Z
04/00Z
05/00Z
07/18Z
07/00Z
127


24 HR FORECAST POSITS
TYPHOON AMY
03-07 OCT 1959
Legend
24 HR FORECAST POSITS
6 HR BEST TRACK POSITS
128
06/00Z
05/00Z
04/00Z